

Accepted / Filed

DEC 13 2016

Federal Communications Commission
Office of the Secretary

OCT 05 2016

US BANK/FCC

READ INSTRUCTIONS CAREFULLY
BEFORE PROCEEDINGFEDERAL COMMUNICATIONS COMMISSION
REMITTANCE ADVICE
FORM 159Approved by OMB
3060-0589
Page No. 1 of 21610069097834001
✓
Gau

(1) LOCKBOX # 979097		SPECIAL USE ONLY	
		FCC USE ONLY	
SECTION A - PAYER INFORMATION			
(2) PAYER NAME (if paying by credit card enter name exactly as it appears on the card) Mark G Hammann		(3) TOTAL AMOUNT PAID (U.S. Dollars and cents) \$495.00 200.00 m.h. 10-5-16	
(4) STREET ADDRESS LINE NO. 1 21405 Alum Creek Ct.			
(5) STREET ADDRESS LINE NO. 2			
(6) CITY Ashburn		(7) STATE VA	(8) ZIP CODE 20147
(9) DAYTIME TELEPHONE NUMBER (include area code) 703-309-3738		(10) COUNTRY CODE (if not in U.S.A.)	
FCC REGISTRATION NUMBER (FRN) REQUIRED			
(11) PAYER (FRN) 0024435950		(12) FCC USE ONLY	
IF MORE THAN ONE APPLICANT, USE CONTINUATION SHEETS (FORM 159-C) COMPLETE SECTION BELOW FOR EACH SERVICE, IF MORE BOXES ARE NEEDED, USE CONTINUATION SHEET			
(13) APPLICANT NAME Marine Instruments S. A.			
(14) STREET ADDRESS LINE NO. 1 21405 Alum Creek Ct.			
(15) STREET ADDRESS LINE NO. 2			
(16) CITY Ashburn		(17) STATE VA	(18) ZIP CODE 20147
(19) DAYTIME TELEPHONE NUMBER (include area code) 703-309-3738		(20) COUNTRY CODE (if not in U.S.A.)	
FCC REGISTRATION NUMBER (FRN) REQUIRED			
(21) APPLICANT (FRN) 0024435950		(22) FCC USE ONLY	
COMPLETE SECTION C FOR EACH SERVICE, IF MORE BOXES ARE NEEDED, USE CONTINUATION SHEET			
(23A) CALL SIGN/OTHER ID	(24A) PAYMENT TYPE CODE PDWM	(25A) QUANTITY 1	
(26A) FEE DUE FOR (PTC) \$495.00	(27A) TOTAL FEE 200.00 m.h. 10-5-16 \$495.00	FCC USE ONLY	
(28A) FCC CODE 1		(29A) FCC CODE 2	
(23B) CALL SIGN/OTHER ID	(24B) PAYMENT TYPE CODE	(25B) QUANTITY	
(26B) FEE DUE FOR (PTC)	(27B) TOTAL FEE	FCC USE ONLY	
(28B) FCC CODE 1		(29B) FCC CODE 2	
SECTION D - CERTIFICATION			
CERTIFICATION STATEMENT I, <u>Mark Hammann</u> , certify under penalty of perjury that the foregoing and supporting information is true and correct to the best of my knowledge, information and belief.			
SIGNATURE <u>Mark G. Hammann</u>		DATE 21 Sept 2016	

PAID BY CREDIT CARD

No. of Copies rec'd 0
List ABCDE

September 25, 2016

Federal Communications Commission
1270 Fairfield Rd
Gettysburg, PA 17325-7245
Attn: WTB-TSI Daniel McCleary

RECEIVED & INSPECTED

SEP 28 2016

FCC-GBG MAILROOM

RE: Request for Waiver to CFR 47 Part §2.1055 and §80.209
Device Model /M3P/M3P-T GPS HF Radio Buoy for Commercial Fishing Operations

This correspondence is to request a waiver of the technical requirements governing private communications in FCC Rules Part §80.209 related to commercial fishing operations and "associated ship units".

The device is an HF radio GPS buoy which is used to tag the location of gear used in coastal and high seas fishing operations. The buoys are attached to the fishing gear in order to facilitate safe and efficient recovery, to prevent gear loss, navigational risk, and ghost fishing.

This is radio determination buoy operating at 26MHz. The FCC granted a waiver on the frequency (DA 16-219) stating that we are exempt for Part 80.373(c) frequencies. It also states that the remaining requirements of Part 80 Subpart E be met. The device is FSK which would give a F1D designation.

We request a waiver of the following two technical specifications:

§2.1055 Measurements required: Frequency stability.

(a) The frequency stability shall be measured with variation of ambient temperature as follows:

(1) From -30° to + 50° centigrade for all equipment except that specified in paragraphs (a) (2) and (3) of this section

§80.209 Transmitter frequency tolerances.

(3) Band 4000-27500 kHz:	
(i) Coast stations and Alaska fixed stations:	
For single sideband and facsimile emissions	20 Hz.
For narrow-band direct printing and data emissions	10 Hz. ²
For digital selective calling emissions	10 Hz.
For Morse telegraphy emissions	10.
For all other emissions	15 Hz.
(ii) Ship stations:	
For transmitters with narrow-band direct printing and data emissions	10 Hz. ²

Waiver Request

The technical provisions that we are requesting are as follows:

1. In Part §2.1055 we request a test range of **0-40°C** in leau of -20-50°C according to operations in the ocean.
2. In Part §80.209, we request a tolerance of **50 Hz** in leau of 10 Hz between the temperature range of 0-40oC which is the operational range of our equipment.

Brochures describing the device are attached. These buoys form part of the ocean fishing gear and daily fishing operations. Transmissions are <1 Watt, and 3.9 seconds in duration every 5, 10 or 15 minutes (configurable). Data are received by the standard SSB HF radio located on the vessel or our model MIR5000 SSB receiver and decoder box.

Explanation:

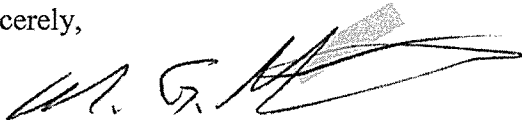
In recent testing we found our buoy has a 200 Hz deviation in the transmitted frequency with temperature change. We have found a way to meet the rule specification of 10 Hz but at a low cost/benefit balance. Frequency variability is not critical to the system's operation and not a risk to other devices given the short 3.9 second transmission every 10 minutes (can be configured for every 5 or 15 minutes); we must pass the price increase on to the fisherman as a higher sale price. However, we have located a more cost effective component that will limit to variability to 50 Hz with no additional cost to the end user.

Benefits of this system include:

- Faster and safer recovery of fishing equipment,
- Faster recovery of the catch enhances quality, and reduces mortality of bycatch,
- Reduction of fuel consumption and the carbon footprint of the vessels,
- Reduction of lost fishing gear preventing 'ghost' fishing posing a threat to wildlife,
- Reduction of lost fishing gear that could cause hazards to navigation.

Please contact the undersigned if you have any questions,

Sincerely,



Gregory Hammann

Director Strategic Business Development

ghammann@marineinstruments.es

Marine Instruments

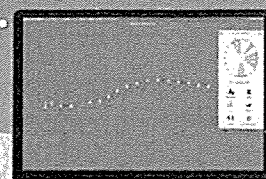
21405 Alum Creek Ct.

Ashburn, VA 20147

+1-703-309-3738



LAT: 43°23.90'N
 LON: 08°24.2'W
 Bat: 14.0V
 Dist: 74.421nm
 Course: 13°



Communications

Reception via radio through MIR-2200 or MIR-5000 (Marine Instruments reception systems)

Technical characteristics

Frequency of transmission
 26 MHz

Battery
 Rechargeable through the antenna

Weight
 Buoy: 1,6 Kg Tube: 3,5Kg.

Working temperature
 0°C a +50°C

Immersion guaranteed
 100m

Range
 50 miles

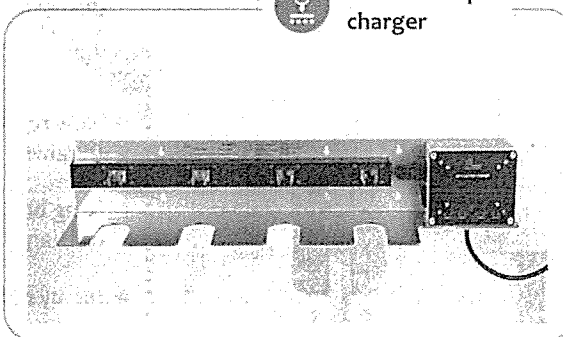
Dimensions



Accessory



MIP-C multiple
 charger



- Allows the independent and simultaneous charge of four M3P buoys.
- Individual LEDs to indicate the charging status of each buoy.
- Battery maintenance current to avoid battery discharge.
- Stainless steel high quality stand.

M3P v102 EN

Rúa dos Padróns nº4 (Vial 3). Parque Empresarial Porto do Molle.
 36350 Nigrán, Pontevedra [SPAIN]. [T] +34 986 366 360.

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 www.marineinstruments.es